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10/821,741	04/09/2004	Werner Stuffle	SCH-00086	2454

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Warn, Burgess & Hoffmann, P.C.  
P.O. Box 70098  
Rochester Hills, MI 48307

EXAMINER
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CARTER, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
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2875

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/821,741  
Filing Date: April 09, 2004  
Appellant(s): STUFFLE ET AL.

\_\_\_\_\_  
Philip R Warn  
WARN, HOFFMANN, MILLER & LAONE, P.C.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 24 September 2006 appealing from the  
Office action mailed 22 December 2005.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Reitter & Schefenacker Sound GMBH a German corporation, having a place of business at, Wolf-Hirth-Strasse 9, Esslingen, erman, D-73730 is the Assignee of Record, at Reel 015613/0352.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The copy of the appealed claims contained in the Appendix to the brief is correct.

6,545,418	Kolpasky	4-2003
6,158,869	Barnes	12-2000
5,964,519	Chun-Ying	10-1999
6,283,414	Quinones	9-2001

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1 and 4-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kolpasky (6,545,418) in view of Barnes (6,158,869).

With respect to claim 1, Kolpasky shows a speaker unit for use in a motor vehicle, comprising: at least one speaker (12) having a chassis; and at least one light source (27), the at least one light source being installed in the chassis of a speaker electrically connected to the direct-current network on board the motor vehicle (33) (the speaker unit to connect to the vehicles electrical system, which is direct-current, through item 33). Kolpasky does not show the at least one light source installed outside of the diaphragm in the manner claimed (although Kolpasky does explicitly teach the light source installed outside of the exciter 31). The Examiner considers that the diaphragm

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(22) of Kolpasky is not a traditional speaker diaphragm, and because it is flat it does not create the interior space or outside area that a traditional cone diaphragm would.

Therefore the light sources may be considered "outside the diaphragm" because they are actually disposed behind the diaphragm; but the Examiner has incorporated a second reference because Barnes teaches a traditional speaker with a light source disposed outside a diaphragm in a more traditional manner. Barnes, drawn to light attachment to speakers, teaches at least one light source (18) installed outside of the diaphragm (Fig. 2). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the light configuration of Barnes in the speaker of Kolpasky, in order to create better lighting for the intended surface by reducing the cost of manufacturing, assembly, and/or installation; a light that requires less space; and provide a more pleasing aesthetic appearance (Abstract and column 1, lines 51-62).

With respect to claim 5, Kolpasky teaches all of the claimed elements, as disclosed above, except for the light source being arranged parallel to the axis of a speaker. Barnes teaches light-emitting diodes arranged in any two or three-dimensional configuration (column 4, lines 58-60). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the arrangements of Barnes in the speaker unit of Kolpasky, in order to create better lighting for the intended surface by reducing the cost of manufacturing, assembly, and/or installation; a light that requires less space; and provide a more pleasing aesthetic appearance (Abstract and column 1, lines 51-62).

As for claim 6, Kolpasky further shows the speaker unit wherein the light source (27) is arranged perpendicular to the axis of a speaker (axis along panel 22; in the claims "the axis" is not defined as an axis in the direction the speaker emits sound, so the Examiner interpreted axis to mean the axis in which the speaker is disposed, or the axis long panel 22).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kolpasky and Barnes as applied to claim 1 above, and further in view of Chun-Ying (5,964,519).

With respect to claim 2, Kolpasky and Barnes teach all of the claimed elements, as disclosed above, except for the light source being screwed into the chassis. Chun-Ying, drawn to a light and speaker assembly, teaches the use of a light (5) that is screwably secured in a light holder (Column 2, lines 45-46). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the teaching of a screwably secured light of Chun-Ying to attach the lights to the speaker of Kolpasky, in order to achieve a simple and secure attachment of the light to the chassis.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kolpasky and Barnes as applied to claim 1 above, and further in view of Quinones (6,283,414).

With respect to claim 3, Kolpasky and Barnes teach all of the claimed elements, as disclosed above, except for the light source being soldered into the chassis. Quinones, drawn to attaching lights, teaches the use of soldering to attach small lights (column 8, lines 17-20). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the teaching of soldering to attach small lights of

Quinones to attach the lights to the speaker of Kolpasky, in order to achieve a simple and secure attachment of the light to the chassis.

#### **(10) Response to Argument**

Appellant argues that Kolpasky in view of Barnes does not teach "at least one light source being installed in the chassis of a speaker outside of a diaphragm. Kolpasky does explicitly teach at least one light source (27) installed outside of the diaphragm (22; column 3, lines 11-16); the diaphragm (22) of Kolpasky is not a traditional speaker diaphragm, and because it is flat it does not create the interior space that a traditional cone diaphragm would, therefore the light sources are "outside the diaphragm" because they are actually disposed behind the diaphragm. The Examiner has incorporated a second reference because Barnes teaches a traditional speaker (12) with a light source (18) disposed outside a diaphragm (Fig. 2). The light source (18) is shown disposed in grill (16) of the speaker (12). As seen in the Appellants Figs. 3-6, disposing a light source in the grill/grid (17) is outside the diaphragm (14) of a traditional speaker (11).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the grill of Barnes on the frame of Kolpasky, in order to improve the lighting for an intended surface by reducing the cost of manufacturing, assembly, and/or installation; a light that requires less space; and provide a more pleasing aesthetic appearance (Abstract and column 1, lines 51-62). Attaching the grill of Barnes over the speaker of Kolpasky would provide a light source (18) outside of the diaphragm (in the grill) but inside the chassis (by attaching the grill (16 via 26) of Barnes to the frame of

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Kolpasky, the grill of Barnes would actually form part of the chassis for the speaker of Kolpasky).

Appellant argues that Kolpasky does not teach or suggest an illuminated speaker assembly, when in fact Kolpasky's title is "Illuminated Speaker Assembly." Kolpasky teaches a speaker (12) in a chassis (14, 18 and 20), as well as a diaphragm member (22; in column 3, lines 11-16 and the Abstract Kolpasky clearly states that panel 22 is excited in order to create sound, making it a speaker diaphragm).

Appellant argues that Barnes teaches sound being transmitted through the light emitting device (18), which is correct. However, this relationship does not suggest "that the light emitting device is not outside the diaphragm." Rather, in column 3, lines 11-16, Barnes makes it clear that the sound making device (or diaphragm) transmits sound from a remote location through the grille (part of the chassis that holds the light source).

Appellant asserts that the Examiner has used impermissible "hindsight" to combine Kolpasky and Barnes. But as stated above, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the grill of Barnes on the frame of Kolpasky, in order to improve the lighting for an intended surface by reducing the cost of manufacturing, assembly, and/or installation; produce a light that requires less space; and provide a more pleasing aesthetic appearance (Abstract and column 1, lines 51-62).

In regard to claims 5 and 6, Appellant argues that Kolpasky does not teach a light source being arranged parallel or perpendicular to the axis of the speaker. However, since the Appellant fails to define "the axis" in the claims the Examiner is free to define



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the axis in any way that meets the claims. The Examiner has interpreted axis to mean the axis in which the speaker is disposed, or the axis long panel 22. And therefore, as is clearly shown in Fig. 2, the light source (27) is arranged perpendicular to the axis (axis along panel 22). Further, with the combination of Barnes (column 4, lines 58-60), it would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the arrangements of Barnes in the speaker unit of Kolpasky, in order to create better lighting for the intended surface by reducing the cost of manufacturing, assembly, and/or installation; a light that requires less space; and provide a more pleasing aesthetic appearance (Abstract and column 1, lines 51-62).

Contrary to Appellant's argument in regard to claim 2, Chun-Ying is not relied upon to teach "using the reading lamp assembly in a motor vehicle," nor "at least one light source being installed in the chassis of a speaker outside of the diaphragm." As discussed above, Kolpasky and Barnes teach all of these limitations. Chun-Ying is only relied upon to teach a manner of connection for a light source to a speaker assembly. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the teaching of a screwably secured light of Chun-Ying to attach the lights to the speaker of Kolpasky, in order to achieve a simple and secure attachment of the light to the chassis.

In regard to claim 3, Quinones is not relied upon to teach "at least one light source being installed in the chassis of a speaker outside of the diaphragm." As discussed above, Kolpasky and Barnes teach all of these limitations. Quinones is only relied upon to teach a solder connection for a light source. It would have been obvious

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to one of ordinary skill in the art, at the time of the invention, to use the teaching of soldering to attach small lights of Quinones to attach the lights to the speaker of Kolpasky, in order to achieve a simple and secure attachment of the light to the chassis.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

**(12) Conclusion**

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,




William J. Carter  
Assistant Examiner  
November 16, 2006

Conferees:



Sandra O'Shea, SPE



RENEE LUEBKE  
PRIMARY EXAMINER

David Blum, TQAS

